

# **TABLE OF CONTENTS – Laboratory Procedures for Veterinary Technicians: Laboratory Manual, 7th Edition**

## **UNIT 1: THE VETERINARY PRACTICE LABORATORY**

1. Safety and OSHA Standards
2. General Laboratory Equipment
3. The Microscope
4. The Metric System and Lab Calculations
5. Quality Control and Record Keeping (**UPDATED!**)

## **UNIT 2: HEMATOLOGY**

6. Hematopoiesis
7. Sample Collection and Handling
8. Automated Analyzers
9. Hemoglobin, PCV, and Erythrocyte Indices
10. Evaluating the Blood Film
11. Morphologic Abnormalities of Blood Cells
12. Additional Hematologic Tests
13. Hematopoietic Disorders and Classification of Anemia

## **UNIT 3: HEMOSTASIS**

14. Principles of Blood Coagulation
15. Sample Collection and Handling
16. Platelet Evaluation
17. Coagulation Testing
18. Disorders of Hemostasis

## **UNIT 4: IMMUNOLOGY (ENTIRE UNIT UPDATED!)**

19. Basic Principles of Immunology
20. Common Tests Performed in the In-House Testing
21. Blood Groups and Immunity
22. Intradermal Testing
23. Reference Laboratory Tests
24. Disorders of the Immune System

## **UNIT 5: URINALYSIS**

25. Anatomy and Physiology of the Urinary System
26. Sample Collection and Handling
27. Physical Examination of Urine
28. Chemical Evaluation
29. Urine Sediment Analysis

## **UNIT 6: CLINICAL CHEMISTRY**

30. Sample Collection and Handling
31. Automated Analyzers
32. Protein Assays and Hepatobiliary Function Tests
33. Kidney Function Tests
34. Pancreatic Function Tests
35. Electrolyte and Acid-Base Status
36. Miscellaneous Tests

## **UNIT 7: MICROBIOLOGY**

37. Introduction to Microbiology
38. Equipment and Supplies
39. Sample Collection and Handling
40. Staining Specimens
41. Culture Techniques
42. Antimicrobial Sensitivity Testing
43. Additional Testing
44. Mycology

## **UNIT 8: PARASITOLOGY**

45. Nematodes
46. Cestodes, Trematodes, and Acantocephelans
47. Protozoa and Rickettsia
48. Arthropods
49. Sample Collection and Handling
50. Diagnostic Techniques

## **UNIT 9: CYTOLOGY**

51. Sample Collection and Handling
52. Preparation of Cytology Smears
53. Microscopic Evaluation
54. Cytology of Specific Sites

### **Appendix A:**

Chapter Review Questions by Unit

### **Appendix B:**

Reference Ranges

### **Appendix C:**

Bacterial Pathogens of Veterinary Importance

### **Appendix D:**

Professional Associations Related to Veterinary Clinical Laboratory Diagnostics

## **Appendix E:**

Common Parasites of Some Exotic Animal Species.